

**Indiana-Course Aligned Assessment  
Anatomy and Physiology – Sample Items**

1. In which order would a splinter pierce the epidermal layers of a person's skin?

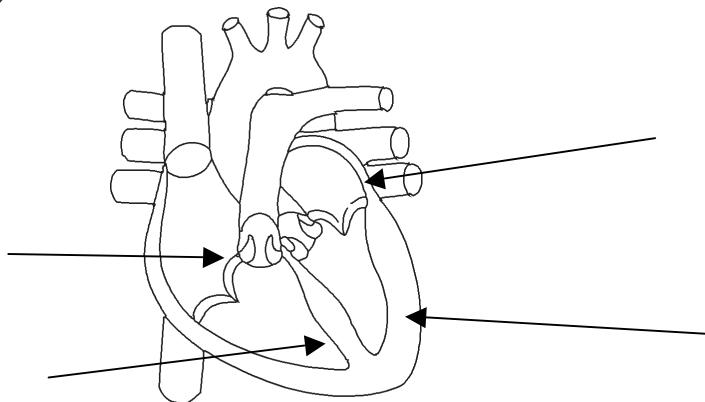
- A basale, spinosum, granulosum, corneum
- B corneum, granulosum, spinosum, basale
- C granulosum, basale, spinosum, corneum, lucidum
- D basale, spinosum, granulosum, lucidum, corneum

2. The best skeletal muscle relaxant to administer to a surgery patient is one that

- A allows sodium to enter muscle cells
- B pumps potassium out of muscle cells
- C bathes muscle cells with calcium ions
- D blocks acetylcholine receptors of muscle cells

3. On the diagram below, label the 4 chambers of the heart and describe the relative oxygen and carbon dioxide levels for each chamber. [2 points]

- Right atrium (RA)
- Right ventricle (RV)
- Left atrium (LA)
- Left ventricle (LV)



## Answer Key

Item	Answer	Alignment
1	B	AP.3.1
2	D	AP.5.3
3	Top Left: RA, low oxygen, high carbon dioxide  Top Right: LA, high oxygen, low carbon dioxide  Bottom Left: RV, low oxygen, high carbon dioxide  Bottom Right: LV, high oxygen, low carbon dioxide	AP.10.3